

CLAIMS

1. A purified polypeptide shown in SEQ ID NO: 2, or a fragment or variant thereof exhibiting at least about 50% sequence homology to the naturally occurring polypeptide, wherein said fragment or variant inhibits platelet function.
2. A polypeptide according to claim 1 which interferes with the binding of at least one cell surface integrin with its respective ligand.
3. A polypeptide according to claim 2 wherein the integrin is GPIIb/IIIa ($\alpha_{IIb}\beta_3$) and the ligand is fibrinogen.
4. A polypeptide according to claim 2 wherein the integrin is GPIa/IIa ($\alpha_2\beta_1$) and the ligand is collagen.
5. A polypeptide according to claim 2 which interferes with the binding of more than one integrin.
6. A polypeptide according to claim 1 which inhibits both platelet aggregation and platelet adhesion.
7. A polypeptide according to claim 1 shown in SEQ ID NO: 2.
8. A pharmaceutical composition comprising the polypeptide of claim 1.
9. A method for treating a patient comprising administering a composition comprising an effective amount of the polypeptide according to claim 1 to the patient to inhibit platelet function.
10. A composition for inducing the immune response of a mammal comprising the polypeptide of claim 1.

11. A composition for inducing the immune response of a mammal susceptible to hookworm infection comprising the polypeptide of claim 1.
12. A purified polypeptide isolated or cloned from hookworms selected from the group consisting of *Ancylostoma duodenale*, *Ancylostoma ceylanicum*, *Necator americanus*, and *Ancylostoma caninum*, which inhibits platelet function.
13. A polypeptide according to claim 12 isolated from *Ancylostoma caninum*.
14. A polypeptide according to claim 12 which inhibits the binding of fibrinogen to cell surface integrin GPIIb/IIIa ($\alpha_{IIb}\beta_3$).
15. A polypeptide according to claim 12 which inhibits the binding of collagen to cell surface integrin GPIa/IIa ($\alpha_2\beta_1$).
16. A polypeptide according to claim 12 which inhibits platelet aggregation in response to an agonist selected from the group consisting of epinephrine, thrombin, and ADP.
17. A pharmaceutical composition comprising the polypeptide of claim 12.
18. A method for treating a patient comprising administering a composition comprising an effective amount of the polypeptide according to claim 12 to the patient to inhibit platelet function.
19. A composition for inducing the immune response of a mammal susceptible to hookworm infection comprising the polypeptide of claim 12.
20. The cDNA sequence shown in SEQ ID NO: 1.